Attorney's Docket No.: Intel 10559-229001/P8794

Listing of Claims

This listing of claims replaces all prior versions, and listings, of claims in the application:

1. (Currently Amended) Apparatus comprising:

a first component configured to <u>perform a route look-up to identify a proxy egress port by which a data packet is to leave the first component, to send an Address Resolution Protocol (ARP) request for a hardware address of an egress port by which the data packet is to leave a networking router architecture to reach the receiver, to receive a response to the ARP request that includes the hardware address of the egress port, and to</u> ~~forward data based on a lookup in a routing table and to replace a destination address in an Ethernet header of the data to identify a second component~~ <u>label the data packet with information identifying the hardware address of the egress port</u>;

~~the~~ <u>a</u> second component <u>comprising the egress port and</u> configured to receive the data <u>packet</u>; and

an intermediate component bridging the first component and the second component to forward the data <u>packet</u> based on the ~~replaced destination~~ <u>hardware</u> address <u>of the egress port</u>.

2.   (Currently Amended)   The apparatus of claim 1 <u>further</u>
comprising additional intermediate components bridging the first
component and the second component to forward the data.

3.   (Original)   The apparatus of claim 1 wherein the first
component is configured to receive a packet from a first host
and the second component is configured to deliver the packet to
a second host.

4.   (Currently Amended)   The apparatus of claim 3 wherein
the routing table used to ~~set a path from the first component to~~
~~the second component~~ <u>identify the egress port</u> is computed by
~~determining~~ <u>identifying</u> a port that leads to the second host.

5.   (Currently Amended)   The apparatus of claim 3 wherein<u>:</u>
~~the data comprises a request for an address to which to~~
~~send the packet;~~
the first component is configured to ~~forward~~ <u>broadcast</u> the
<u>ARP</u> request;
the intermediate component ~~in the path~~ is configured to
forward the <u>ARP</u> request to the second component without ~~looking~~
~~up the~~ <u>a</u> routing table <u>look-up</u>; and
the second component is configured to receive the <u>ARP</u>
request and to ~~send its~~ <u>send the response that includes the</u>
<u>hardware</u> address back to the first component.

3

6.   (Currently Amended)   The apparatus of claim 1 wherein
~~the data is part of a packet, and~~ the first component is
configured to encapsulate the packet with the <u>hardware</u> address
of the second component and to forward the encapsulated <u>data</u>
packet through the intermediate component to the second
component.

7.   (Currently Amended)   The apparatus of claim 6 wherein
the intermediate component acts as a transparent bridge to
forward the <u>ARP</u> request and the <u>encapsulated data</u> packet.

8.   (Currently Amended)   The apparatus of claim 6 wherein
the second component is configured to route the <u>encapsulated</u>
<u>data</u> packet received through the intermediate component to a
second host.

9.   (Original)   The apparatus of claim 1 wherein the first
component, the intermediate component, and the second component
are connected through a network medium.

10.   (Original)   The apparatus of claim 9 wherein the
network medium comprises Ethernet.

11.   (Canceled)

12.   (Currently Amended)   A method comprising:
performing a lookup in a routing table to determine ~~a path~~

4

~~to send~~ a proxy egress port by which data ~~from a sender~~ is to

leave a component ~~to a receiver~~;

sending a request for an address of an egress component by

which the data is to leave a networking router architecture to

reach a receiver;

receiving a reply to the request, the reply including the

address of the egress component;

~~replacing a destination address in an Ethernet header of~~

labeling the data with the address to identify ~~a second~~

~~component connected to the receiver~~ the egress component; and

forwarding the data, based on the ~~replaced destination~~

address, through an intermediate component ~~between a first~~

~~component connected to the sender and the second component~~ to

the egress component.

13.   (Currently Amended) The method of claim 12 ~~further~~

~~comprising:~~

~~forwarding~~ wherein the data is forwarded through additional

intermediate components without ~~looking up the~~ a routing table

look up ~~through additional intermediate components between the~~

~~first component and the second component~~.

14.   (Currently Amended) The method of claim 12 further

comprising[[:]]

~~sending a packet from the sender to the first component;~~

5

~~and~~

~~routing~~ broadcasting the ~~data comprising a~~ request for ~~an~~ the address of the ~~second~~ egress component from the ~~first~~ intermediate component.

15.   (Currently Amended)   The method of claim 14 further comprising:

forwarding the request for the address through the intermediate ~~components~~ component; and

sending ~~a~~ the reply from the ~~second component~~ egress component to the intermediate component; and

forwarding the reply from the intermediate component without looking up the routing table to the ~~first~~ component that sent the request for the address.

16.   (Currently Amended)   The method of claim 12 wherein:

labeling the data with the address ~~further comprising:~~ comprises encapsulating ~~the data comprising~~ a data packet with a media access control (MAC) address ~~information~~ of the ~~second~~ egress component; and

forwarding the data comprises forwarding the encapsulated data packet to the ~~second~~ egress component through the intermediate component without ~~looking up the~~ a routing table look-up.

6

17.   (Currently Amended)   The method of claim 16 further comprising:

routing the <u>data</u> packet from the ~~second~~ <u>egress</u> component to the receiver.

18.   (Currently Amended)   An article comprising one or more machine-readable media that store machine-executable instructions for causing one or more machines to:

perform a look up in a routing table to determine ~~a path to send~~ <u>a proxy egress port by which</u> data ~~from a sender~~ <u>is to leave the one or more machines</u> ~~to a receiver~~;

<u>send a request for a media access control (MAC) address of an egress component by which the data is to leave a networking router architecture to reach a receiver;</u>

<u>receive a reply to the request, the reply including the MAC address of the egress component;</u>

~~replace a destination address in an Ethernet header of~~ <u>label</u> the data <u>with the MAC address of</u> ~~to identify a second~~ <u>the</u> egress component ~~connected to the receiver~~; and

forward the data, based on the ~~replaced destination~~ <u>MAC</u> address, through an intermediate component ~~between a first component connected to the sender and~~ <u>to</u> the ~~second~~ <u>egress</u> component.

19.   (Canceled)

7

Attorney's Docket No.: Intel 10559-229001/P8794

20.   (Previously Presented)   The article of claim 18

further causing the one or more machines to:

send receive the data in a packet from the sender to the

first component; and

route broadcast the data comprising a request for an the

MAC address of the second egress component from the first

intermediate component.

21.   (Canceled)

22.   (Previously Presented)   The article of claim 18

further causing the one or more machines to:

encapsulate a packet comprising the data comprising a

packet with the MAC address information of the second component;

and

forward the encapsulated packet to the second egress

component through the intermediate component without looking up

the a routing table look-up.

23.   (Previously Presented)   The article of claim 22

further causing the one or more machines to:

route the packet from the second egress component to the

receiver.

24.   (Previously Presented)   The apparatus of claim 1

wherein the apparatus comprises a modularized network element

8

PAGE 9/17 * RCVD AT 7/17/2006 8:25:51 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-2/13 * DNIS:2738300 * CSID:8586785099 * DURATION (mm-ss):06-50

that includes the first component, the second component, and the
intermediate component, the position of the components in the
network element changing based on a path of the data.

25.   (Canceled)   .

26.   (Currently Amended)   The method of claim 12 wherein
performing the lookup to determine the path comprises performing
the lookup to determine the path in a modularized network
element that includes ~~the first component,~~ the ~~second~~ egress
component[[,]] and the intermediate component, <u>wherein</u> the
position of the components in the network element ~~changing~~
<u>changes</u> based on the path.

27.   (Canceled)

28.   (Previously Presented)   The article of claim 18
further causing the one or more machines to:

    perform the look up to determine the path in a modularized
network element that includes ~~the first component,~~ the ~~second~~
<u>egress</u> component[[,]] and the intermediate component, <u>wherein</u>
the position of the components in the network element ~~changing~~
<u>changes</u> based on the path.

29.   (Canceled)

9